



**USAID**  
FROM THE AMERICAN PEOPLE

**GUATEMALA**

## GLOBAL CLIMATE CHANGE

SEPTEMBER 2003



*Primarily through protected area management, training and technical assistance, and vulnerability reduction and adaptation, USAID is succeeding in preserving the environmentally significant lands of Guatemala. At the same time, these efforts have addressed the issue of climate change by preserving carbon stocks and building the capacity of the Guatemalans to reduce greenhouse gas emissions.*

**Background.** Rich biodiversity, cultural diversity, and a historic past easily place Guatemala among one of the world's top tourism destinations. Efforts to conserve this diversity have been recognized by the United Nations Educational, Scientific, and Cultural Organization (UNESCO), the Ramsar Convention on Wetlands, and other international organizations and treaties. Guatemala's importance as a point of convergence of species migrating from both North and South America is vital for the conservation of many migratory bird species from the United States.

**Sector-Specific Climate Change Activities.** USAID's environment program in Guatemala supports environmentally sound management of natural resources in priority areas of great biodiversity, including the Maya Biosphere Reserve in the Petén, the Motagua-Polochic system (which includes the Sierra de las Minas Biosphere Reserve), and the Atitlan Volcanoes Bioregion. At the same time, the program offers sustainable income-generation alternatives to people living in and around protected areas. These include efforts to establish certified timber production, encourage tourism, and promote environmentally sound production practices.

Specifically, efforts that support long-term ecosystem health and the conservation of carbon stocks include:

- Improving natural resource management for the conservation of biodiversity in selected bioregions
- Providing incentives for sustainable land use and conservation through the development of sound environmental policies
- Improving civil society's analysis of and ability to address environmental policy issues
- Strengthening institutions responsible for natural resource use and conservation of biodiversity, including the central government, municipalities, and local grassroots organizations

**Protection of Critical Habitats That Promote Conservation of Carbon Stocks.** One priority area for USAID's environment program in Guatemala is supporting forest and land management in the Maya Biosphere Reserve (MBR) in Petén, the largest protected area in Guatemala. USAID has also extended these activities into the new geographic areas of the Atitlan volcanoes and the Motagua-Polochic system. Through the promotion of sustainable forestry and land use management practices, a growing number of concessions and contracts have been

**USAID's partners in climate change activities in Guatemala include\*:**

- Association of Forest Communities of Petén (ACOFOP)
- Cooperative for Assistance and Relief Everywhere, Inc. (CARE)
- Chemonics
- Catholic Relief Services (CRS)
- Defensores de la Naturaleza
- FONTIERRAS (Land Fund)
- Institute for Seismology, Vulcanology, and Meteorology (INSIVUMEH)
- International Resources Group (IRG)
- Ministry of Agriculture
- Ministry of Education
- Ministry of Environment and Natural Resources
- Ministry of Health
- National Aeronautics and Space Administration (NASA)
- National Coordinator for the Reduction of Disasters (CONRED)
- National Council for Protected Areas (CONAP)
- The Nature Conservancy (TNC)
- Office of U.S. Foreign Disaster Assistance (USAID/OFDA)
- U.S. Federal Emergency Management Agency (FEMA)
- U.S. Department of Interior (DOI)
- U.S. Environmental Protection Agency (EPA)
- U.S. Forest Service (USFS)
- U.S. Geological Survey (USGS)
- U.S. National Oceanic and Atmospheric Administration (NOAA)

awarded to communities to manage hundreds of thousands of hectares of forest. Additionally, incidents of forest fires are being reduced, and communities are increasingly working together to improve sustainable environmental practices.

With support from USAID's environment program, the master plan for the MBR was developed and approved in 2001 with broad participation of environmental and local community organizations in the Petén. The plan lays out the framework for full national, municipal, and local government management of this important biosphere reserve.

With USAID assistance, the National Council for Protected Areas (CONAP) has improved management of protected areas through the formulation and approval of a co-administration policy, implemented through awarding contracts to local nongovernmental organizations (NGOs). Examples that have demonstrated the effectiveness of this model arrangement are those being applied for Sierra del Lacandón National Park co-administered by a Guatemalan NGO and through the forestry concessions mechanism in multiple-use zones of the MBR. With the continued assistance of USAID, 11 community and two commercial forestry concessions were legally established in the multiple-use zone of the MBR, providing support for an improved quality of life, better salaries, alternative sources of income, family stability, poverty alleviation, better access to health and education, job security, and community development. This is the largest certified community-managed forest area in the world, benefiting over 15,000 people while providing an economic incentive for conservation. Advances have also been made in forest management with the development of a landmark strategy that focuses on community entrepreneurship skills and technical assistance.

Additionally, sustainable practices were adopted in fire control, forest management, and non-timber forest products management, reducing fires to near zero in zones that had been significantly affected the year before. Over 46,000 hectares of forest were protected in 2001 by trained fire brigades.

To assist Guatemalans in the above efforts and other environment activities, USAID supports a series of training activities and technical assistance in:

- Protected areas planning and management
- Forestry management (planning and harvesting)
- Municipal and private land management
- Fire prevention and control
- Biodiversity conservation
- Policy formation and evaluation

**USAID's partners in climate change activities in Guatemala include\*:**  
(Cont.)

- Wildlife Conservation Society (WCS)

\* Because partners change as new activities arise, this list of partners is not comprehensive.

- Valuation of environmental services
- Geographic information systems (GIS)

Over \$1.2 million has been leveraged from public and private partner organizations for conservation and natural resource management in the MBR. This includes funding from NGOs such as The Nature Conservancy (TNC) and Defensores de la Naturaleza, which is helping to protect sites in Sierra Lacandón and the Piedras Negras archaeological site, and through TNC counterpart funds under the Parks in Peril Program<sup>2</sup> for the Atitlan and Motagua-Polochic areas.

In 2002, 84,365 hectares of forest were internationally certified. A technical review of forestry practices in community forest concessions found a high level of competence among community members in forest management techniques. Forest management activities provided approximately \$3 million of income for the 16 participating communities. The income and employment generated has reinforced positive attitudes toward the wise use of forest-based products.

*Improved Resilience of Communities and Ecosystems to Potential Climate Change Impacts.* In response to Hurricane Mitch, 22,327 severely affected small farmers were supported in their efforts to recover lost agricultural production capacity, concomitantly making production more sustainable and resistant to future climatic events. By equipping and training personnel of the National Coordinator for the Reduction of Disasters (CONRED) and strengthening the capacity of its network of regional, departmental, municipal, and community-level disaster coordination committees, Guatemala's emergency management, disaster preparedness, and mitigation capacity was strengthened. The CONRED Emergency Operations Center was inaugurated in February 2001 and is operating very effectively. To further support this enhanced capacity at CONRED, equipment and training support provided to the Institute for Seismology, Vulcanology, and Meteorology has helped strengthen the timely provision of data and early warning analyses to CONRED. USAID partners Cooperative for Assistance and Relief Everywhere, Inc. (CARE) and Catholic Relief Services successfully helped form a total of 152 community-level and six municipal-level disaster committees and also conducted community-level capacity building to enable communities to plan for and respond to future disasters. The U.S. government agencies – the Federal Emergency Management Agency (FEMA), the Office of U.S. Foreign Disaster Assistance (OFDA) at USAID, the U.S. Geological Survey, and the National Oceanic and Atmospheric Administration – collaborated with USAID on an innovative interagency approach to strengthen emergency management capability.

*Policy Reform.* The promotion of civil sector organizations in policy dialogue is also an important initiative of USAID's environment program in Guatemala. Policy formation now involves different sectors, including

education, private, public, and non-governmental. Necessary advances are being made in the human settlement policy, due to the fact that human settlements are perhaps the most significant threat to core areas in the MBR. Initial efforts by CONAP did not halt the settlement activity, so a request was made for USAID's assistance. In a participatory process, a draft policy has been developed to further the policy initiatives.

For more information on USAID's climate change activities in Guatemala, visit the USAID Web site at:

- <http://www.usaid.gov>